In the summer of 1968, Steve Reich had four of his most important early works behind him (It’s Gonna Rain (1965), Come Out (1966), Piano Phase (1967), and Violin Phase (1967)), and he found himself “trying to clarify for myself what I was doing.”\(^1\) This reflection resulted in the essay/manifesto “Music as a Gradual Process,” which has become perhaps the most iconic description of process in music. “I am interested in perceptible processes” writes Reich. “I want to be able to hear the process happening throughout the sounding music.”\(^2\) Reich lists several features of process music, but I want to draw our attention to the idea that the “compositional process and [the] sounding music. . . are one and the same thing,” and that this identity between process and music creates a different kind of listening experience than does traditional music:

“Listening to an extremely gradual musical process opens my ears to it, but it always extends farther than I can hear, and that makes it interesting to listen to that musical process again. That area of every gradual (completely controlled) musical process, where one hears the details of the sound moving out away from intentions, occurring [sic] for their own acoustic reasons, is it.”

Compare Reich's attitude toward process with David Lang's attitude toward process in his own music. I interviewed Lang for Sequenza21 in November of 2008, and he was quite explicit: “I don't want people to hear the process.” He then went explained the kind of relationship he prefers to have between composer and audience: “What I want in other people's music is I want permission to listen deeply if I want to and I want permission to feel deeply if I want to. But I want to make the decision myself about how deeply to feel and how deeply to think.” Lang feels that his job as a composer is to give his audience those kinds of permissions and opportunities, and that process enables him to do it:

“I don't want people to know about the mechanics of it, but I also feel like for me there's a way in which these materials, the way of using these processes or mathematical things or my stories or my little silly games that I play--they're ways of me putting up a little screen between what could be a more direct emotional response. . . Imagine there's a room, and this room is 'intense emotional response,' and what is your job as a composer? Is your job to. . . open the door and push people through that door? . . . Well, many composers think that's their job. . . What if a composer's job is to build the waiting room, one of whose doors is 'intense emotional experience.' So my job is not to open that door and push you through, with your blessing or against your will, but my job is just to build the waiting room and to let you know 'here is the place where you may sit, and you make the decision whether you go in that room or not.' . . . And in order to build that room I feel like I have to have some distance from that intense emotional room myself. I think some of these ways of working with materials, some of these rules and structures and formulas, are distancing things for me that allow me to concentrate on the size of the room, the comfort of the benches, whether or not there's good reading material in the room while you're waiting, whether or not there are other doorways out of that room that you could also take, that you're also being invited to take.”\(^3\)
Lang goes on to list other reasons that he uses process:

". . .They're like strategies for me how to take up a certain amount of time. I think also sometimes if you know where you're gonna go in a piece, like if the point of a piece is to start in one place and end in a certain place what's to keep you from just going there in twenty seconds? You have these games, I have these mathematical processes as a way of slowing down this process. . .

It could also be that I have these games because I was educated in a time when you were supposed to count the number of notes you have and permute them in a certain way and every microscopic detail that you paid attention to was supposed to have a meaning on some larger scale also. It could just be that I got that message from my education, that a well made piece is a piece that has this kind of hidden structure.

Plus, it's fun."  4

The Steve Reich of the late 1960s and the David Lang of the early 2000s occupy two quite different territories. For Reich the process is on the surface; for Lang it lies somewhere beneath. Reich expects his audience to hear the process and to listen to it; Lang prefers his audience not to hear it. In fact, for Reich the musical process is a critical part of the aesthetic experience he wants to deliver to his audience, whereas for Lang the aesthetic experience is quite separate and the process is merely a tool that he as the composer is using to build his musical waiting room. In other words, for Lang the musical process is a means to the ends of distancing himself from the potential emotional content of the music, moving from one point to the next, satisfying his socialized beliefs about what constitutes a “well made piece,” and enjoying the experience of composing, whereas for Reich the process is an end in itself. Reich and Lang don't represent the only ways in which the means/end distinction manifests, and the dynamic will turn out to be significantly more complex than what I have just described, but they serve as a useful illustration of my thesis.

2. Minimalism and Conceptualism

The details of the relationship between La Monte Young's early Minimalism and the conceptualism exhibited in work like the Compositions 1960 could be the subject of an entire paper, but we can derive the key information from his interview with Richard Kostelanetz from Selected Writings. Young says

“The very first sound that I recall hearing was the sound of the wind going through the chinks in the log cabin, and I’ve always considered this among my most important early experiences. It was very awesome and beautiful and mysterious; as I couldn’t see it and didn’t know what it was, I questioned my mother about it for long hours.”

At City College, he became interested in the music of Anton Webern, and he was especially interested in one aspect of Webern's serial technique:

“Stasis was very important, because not only was he involved with row technique but he also developed a technique for the repetition of pitches at the same octave placements throughout a section of a movement. That is, each time C, A, or Eb comes back in the section of the movement, it is at the same octave placement. So, as you hear the movement through, you find this static concept of a small number of large chords reappearing throughout the entire movement.”

At UCLA he discovered the drones in Japanese Gagaku and Indian classical music. These were, broadly speaking, the key influences that led to the Trio for Strings in 1958, and elsewhere in Selected Writings Young says “in 1957 I was originally drawn to work with sounds of long duration by intuition alone.” In 1959 Young traveled to Darmstadt where he discovered John Cage, and upon his return to the United States he embarked on the Compositions 1960.

4 Ibid.
The key continuity between the early influences, the Trio for Strings, and the Compositions 1960 is identified by Young in the Kostelanetz interview: “I was perhaps the first to concentrate on and delimit the work to be a single event or object in these less traditionally musical areas. This was a direct development of my application of the technique in my earlier, more strictly sound, compositions.” Sure enough, in each case we have a single event or sound or situation being drawn out over a long stretch of time, from the wind in Young’s childhood home to the sustained tones of Trio to each of the Compositions 1960. This focus on an extra-musical, extra-sonic element in all of these pieces, is consistent with the practice of conceptual art.

Interestingly, the term “Conceptual Art” was coined by Henry Flynt in 1961 in an essay published in An Anthology of Chance Operations, which was edited by La Monte Young. “‘Concept art,’ says Flynt, ‘is first of all an art of which the material is 'concepts', as the material of for ex. Music is sound.’” Flint explains that one of the origins of “concept art” is the notion of the aesthetic beauty of theorems and proofs in mathematics, and says “the antecedents of concept art are commonly regarded as artistic, aesthetic activities; on a deeper level, interesting concepts, concepts enjoyable in themselves, especially a they occur in mathematics, are commonly said to 'have beauty'.” In an interesting parallel to Flynt's analogy to mathematics, Tom Johnson referred several times to experimental musical composition and performance as “research,” devoting an entire review in January 1975 to considering Joan La Barbara as “fully devoted to basic research” in her composition. 

In other words, in conceptual art the aesthetic content—the element of the work that stimulates an aesthetic response or carries the aesthetic meaning—is the concept behind it rather than the physical manifestations of the performance. Young's instruction to “Draw a straight line and follow it” is aesthetically interesting not because of what a performance looks or sounds like—in fact the visual and sonic content of the piece can be radically different from performance to performance. Young performed the piece using plumb lines, sighting with them and drawing on the floor in chalk, but there is no reason that the piece couldn't be performed with pens and a ruler on a single sheet of paper, by car driving across Death Valley using a line drawn by a GPS system, or by an attack helicopter laying down tracer fire and following the illumination. The visual and sonic content of those performances are so dramatically different that an observer who didn't know he was witnessing a performance of Composition 1960 #10 would be unlikely to even know he was seeing and hearing a piece of art. It’s the fact that the activity has been prescribed that carries the aesthetic content. In contrast, a person encountering a piece by Bach would be certain to know it was intended as music, because the sonic content carries most of the aesthetic content.

The Trio for Strings is more obviously music than any of my proposed performances of Composition 1960 #10, but the underlying conceptual principle still applies. The actual sound of each given chord is of fairly minimal interest for its own sake—the real interest, or the bulk of the aesthetic content, comes from the idea of stretching those chords out for a long time. The audience's understanding of the concept of sustained pitches or drones creates an aesthetic context for hearing the piece. In a sense, Young is asking, through the piece, what happens to the audience's experience of music if each pitch or chord is extended far beyond the usual lengths in traditional music, creating stasis. To return, finally, to the terminology of my thesis, the process Young employs in this piece is the stretching out of what in traditional music would be a brief moment of harmonic movement into a long swathe of harmonic stasis. The fact of this process of telescoping the pitches and the harmonic movement houses the primary aesthetic content of the piece—in other words, the process is an end in itself.

3. Types of Minimalist Process

Michael Nyman lists five types of process in Experimental Music: Cage and Beyond:

1. Chance determination processes
2. People processes,

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5 Johnson, The Voice of New Music, p.96
6 Young, Selected Writings, p. 45
3. Contextual processes
4. Repetition process
5. Electronic process

I would add to this list at least one more key process: Mathematical process. This would include the manipulation of pitch and rhythmic materials through permutation, addition, subtraction, multiplication of durations, changes in rate, etc.

4. Minimalism into Postminimalism

The early pieces, from 1958 until about 1975, tend to be based heavily on the aforementioned types of processes, with the processes carrying the bulk of the aesthetic content of the music or at least serving as the aesthetic foundation. It is critical to note that in the case of these pieces in which process is treated as an end in itself I am not arguing that the sonic content of the music is unimportant or irrelevant, or even that it is inherently uninteresting; rather, that regardless of the ultimate aesthetic nature of the sonic content, it is essential to the full appreciation of the piece that the sonic content is a direct product of an underlying process or content. In *Trio for Strings*, for instance, one of the products of the underlying telescoping process is that the audience's attention is drawn to details of the sonic experience that are usually ignored. Minor fluctuations in pitch and intonation become, in comparison to the relative stasis of other elements, enormous changes. Small pauses during the reversing of bowing become vast gaps in the continuity of the drones. These details may or may not seem inherently aesthetically interesting or pleasing to the listener, but either way they are the products of a type of listening that is produced by a conceptual approach to listening. In other words, while the process is an end in itself, the existence of that end serves as a means for stimulating a new type of listening. There are probably no examples, and indeed it is probably impossible for such a piece to exist, where the process is purely ends-oriented. The key feature of Big-M Minimalism is the importance of the ends-oriented process in relation to any means-orientation of those or other processes. In Reich's *Piano Phase*, we again see process (in this case the phasing process) as an end in itself: the bulk of the aesthetic experience is the hearing of the process and the sonic results of the process. Those sonic results, however, are aesthetically appealing independent of the ends-oriented process. Indeed, part of the objective of the process is the aesthetic experience, produced through an ends-oriented process, of exploring what inherently aesthetically interesting sonic results arise from that process, so the phasing process is also a means for generating aesthetically appealing sounds.

The transition from Minimalism to Postminimalism actually hinges on the means and ends orientations appearing in the same pieces. While Minimalism arose from Conceptual Art, from a focus on ends-oriented processes, there was always some interest in the aesthetic properties of the surface-level sonic elements. Young presumably selected the chords that he stretched out in the *Trio for Strings* at least in part because he found the harmonies inherently interesting. In fact, one way to view his process is as the expansion over time of a series of single moments that are aesthetically interesting in themselves. Terry Jennings's *Piano Pieces* of December 1958 (three months after the premiere of *Trio for Strings*) and June and November of 1960 concern themselves with chords held for a long time, exploring both the expansion of the aesthetic moment, and the process of the decay of the piano chords. But those chords are, again, beautiful in themselves. Terry Riley's *In C* uses repetition and a people process, and those ends-oriented process carry substantial aesthetic content, but any given moment of the piece is also musically appealing in a traditional sense—the processes Riley uses are also a means for generating a sonic experience which also carries aesthetic content. In other words, one of the discoveries made during the “basic research” of the early Minimalist period was that the use of process, especially repetition and mathematical process, can be used to create music that is aesthetically appealing in a traditionally musical sense.

Kyle Gann:

“The initial developments of postminimalism came around 1980. In 1978-79, William Duckworth (b. 1943) wrote...
a cycle of 24 piano pieces called *The Time Curve Preludes*. For the most part, they shared minimalism's clean, non-modulating tonality, though spiced up with an occasional smattering of sharp dissonance. They shared minimalism's steady eighth-note beat, though only a couple of the pieces involved minimalistic repetition. They grew from minimalistic additive and subtractive processes, often moving A, AB, ABC, and so on. More importantly, though, they were more subtle and mysterious than minimalist music; they didn't wear their structure on the outside, and you couldn't completely figure out what was going on just from listening.”

Gann describes a compositional technique where process is not used primarily for its own sake, but rather as a means to the end of creating music that can be appreciated in traditional ways—the bulk of the aesthetic content resides in the experience of the sonic elements. This is not to say that there are no ends-oriented processes. The trained listener might well recognize (as Gann does) the additive and subtractive processes and derive aesthetic value from the existence of that process, but that experience is more analogous to the appreciation of Bach's ingenious construction of a fugue than to the engagement with the phasing process in early Reich or with the fact of the glacial pace of Young's harmonic movement. In Bach, we know that writing a four-part fugue is intellectually difficult, and we can appreciate his mastery of the form in an aesthetic way, but that appreciation is premised on the idea that he was able to create music that carries its own aesthetic content even in the context of the technical limitations of the form.

*The Time Curve Preludes* make a useful marker of the tipping point from Minimalism into Postminimalism, and the farther we go into the 1980s and '90s the more we see process used as a means to a variety of ends. Arguably, one reason for the popularity of postminimalist music is the fact that by using repetition and mathematical processes composers are able to write music that has a continuous intensity with a long dramatic arc, which are dominant features of the rock music that today's composers grew up listening to.

David Lang lists a variety of different ends which he uses process to achieve, and other composers presumably have their own lists. In my initial discussion of Lang's use of process I deliberately oversimplified in order to illustrate my point, but we should now return briefly to his work, keeping the “intentional fallacy” in mind. Lang does not want the audience to pay attention to his processes, but those processes exist in the piece to be heard. If the audience approaches his music from the perspective that the music is generated through the use of process, the experience of hearing those processes unfold can be aesthetically interesting in itself. Similarly, in a piece like Michael Gordon's *Trance* portions of the audience might be able to hear the polyrhythmic processes which Gordon is using. In both cases, however, process as a carrier of aesthetic content, process as an end in itself, is merely available for the listener—the bulk of the aesthetic experience is in the sonic products of those processes.

If *The Time Curve Preludes* is a tipping point or an arrival point, however, the transition from the end-orientation to the means-orientation, from the conceptual to the traditionally musical, is clearly already underway at least as early as 1975, when Steve Reich was working on *Music for 18 Musicians*. In Tom Johnson's 1975 review of an early version of *18* he lists nine composers in addition to Reich whom he thinks of as “former minimalists.” Johnson laments Reich's move away from “strength, toughness, and severity which characterized the unrelenting logic of his monochromatic scores such as 'Four Organs.’” He says that in *18* “over everything is a pall of lushness, which seems closer to Ravel or Mahler than to 'Come Out' or 'Music for Pieces of Wood,’” and finds himself “Feeling a little sorry that the era of New York minimalism has come to such an abrupt end. In Robert Fink's analysis of *18* in *Repeating Ourselves*, he observes that Reich begins reintroducing elements of traditional teleology, using additive and subtractive processes, transpositions, quasi-functional harmonies, and other tools to change the “level of musical energy” from point to point.

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7 Gann, *A Forest from the Seeds of Minimalism*
8 The “intentional fallacy” is generally understood as the fallacy of assuming that intentions of the author which are not inherent to the text are relevant to the interpretation of the text. The idea was introduced by Wimsatt and Beardsley in their 1946 article “The Intentional Fallacy.” The application of the intentional fallacy to the study of conceptual art would itself be a worthy topic of study.
9 Johnson, *The Voice of New Music*, p. 107
10 Fink, *Repeating Ourselves*, p. 49
Furthermore, as Fink illustrates, Reich actually breaks his own rules, deviating from the system-derived “correct” bass line in order to create a more traditionally teleological effect.\footnote{Ibid., pp. 52-55}

In January of 1979 Tom Johnson wrote an article for the Village Voice entitled “Whatever Happened to the Avant-Garde” in which he says:

> “Even at the Kitchen, where only a few seasons ago one could count on hearing fresh approaches to electronic circuitry, severely restricted types of minimalism, odd experiments with acoustics, and other types of basic musical research, one is now more likely to encounter light evenings of performance art, pop-classical fusions, or the kinds of modern dance programs that are also presented in four or five other places around New York.”\footnote{Johnson, \textit{The Voice of New Music}, p. 207}

By this point, Duckworth was already at work on \textit{The Time Curve Preludes}. The appeal of process primarily for its own sake had faded, and even many of the composers who had been most involved in its development had moved onto other things. Process is alive and well in the Postminimalist era, but it has moved mostly into the background, rarely employed for its own sake, as an end in itself, but instead used in a variety of ways as a tool for creating a multitude of musical experiences.

For my own teleological reasons, I will close as I opened: with Steve Reich and “Music as a Gradual Process.” In the spring of 2000, Reich was a Montgomery Fellow at Dartmouth College, and he played a recording of his 1999 piece \textit{Triple Quartet} for an undergraduate class. When the piece had ended, one of the students asked “How is that a gradual process?” Reich's reply? “It's not.”\footnote{Kim, \textit{From New York to Vermont: Conversation with Steve Reich}}